

**IL 71 RESISTORS'**  
**EXHIBIT 3.19**



Regulatory and Scientific Expertise – Wetlands, Soils, Ecology, Restoration

ICC Docket No. 06-0706

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~~Emmons~~ Workpapers #12

Cottage Grove, Wisconsin 53527-0128

Ph: 608.839.1998 Fax: 608.839.1966

www.nrc-inc.net

April 14, 2006

Mr. Doug Emmons  
Ameren Services  
PO Box 66149 MC 450  
St. Louis, MO 63166-6149

**RE: *Environmental Summary – Primary and Alternative Routes, 138 kv Proposed Transmission Project LaSalle-Wedron-Ottawa, LaSalle County, Illinois***

## **INTRODUCTION**

Analysis of the environmental conditions along each route was accomplished using recent aerial photographs, National Wetland Inventory (NWI) overlays, and hard copies of soil maps from the 1972 Soil Survey for LaSalle County. Visual inspection has been made of most stream crossings and habitats where route segments are accessible from public roadsides. Field confirmation of wetland boundaries and vegetation conditions will be accomplished during the growing season of 2006 after obtaining permission to access parcels.

In general, the proposed routes (primary and alternative) are located in areas of heavily disturbed vegetation such as areas developed for agricultural, industrial, commercial, or residential uses. Limited amounts of upland forest and wetland habitat of varying degrees of quality occur along several perennial and intermittent stream and river corridors along the routes (primarily along the Little Vermillion and Fox River valleys). The proposed routes cross a number of artificial ditches, grassed waterways, and agricultural drainages that may contain limited amounts of wetland vegetation. However, many of the smaller perennial and intermittent streams within the project area have been significantly altered for agricultural drainage purposes (ditching/channel excavation, tile drainages, clearing of natural vegetation and/or conversion to agricultural plant species). In addition, many of the observed riparian corridors that cross agricultural lands are actively grazed or appear to have been disturbed by grazing in the past.

Summaries of major environmental conditions (major stream and river crossings, less disturbed wetland and upland habitats, natural areas, nature preserves, and cultural resources where known) are given below for each proposed primary route and alternative routes. Unique identifiers have been assigned to all waterway and wetland crossings within the primary route (e.g. UNT-1) and are listed in Table 1. Wetland and Waterway Resources within ROW. The wetlands and waterways within the alternative routes do not have assigned identifiers but are listed in tabular format.

## **WATER RESOURCE AND HABITAT DESCRIPTIONS**

### **North LaSalle – Fox River Primary Route**

This portion of the route crosses 22 waterways and passes over three wetlands (non-waterway). Most of the waterways are intermittent unnamed tributaries (UNT) associated with agricultural swales or ditches (9) situated in open agricultural fields with little to no vegetated corridors. These waterways are generally either deeply excavated channels or gradually sloping grass swales. No natural communities appear to be

present within this route due to the extensive agricultural disturbances, road corridors, and developed areas present within the proposed route.

The named tributary crossings include the Little Vermillion River, Tomahawk River, Pecumsaugan Creek, and the Fox River. The associated corridors of these waterways are generally degraded due to grazing or other agricultural activities. The main channels of both the Little Vermillion River and Tomahawk Creek support degraded upper perennial stream habitat. These stream corridors have been heavily grazed and are comprised of scattered mid to large sized trees with mostly open canopy. The Pecumsaugan Creek crossing is within an agricultural field which in this area has been excavated and ditched. The Fox River crossing contains a narrow band of mesic/floodplain forest habitat and occurs along an existing 12 kv distribution line ROW. Floodplain forest habitat is much more extensive north and south of the proposed crossing location.

There are also several unnamed perennial and intermittent tributaries within this route that are not associated with agricultural fields (8). Generally, the corridors associated with these waterways are degraded, grazed shrub/scrub habitat with the exception of UNT-17a. UNT-17a is situated within a fairly extensive forested corridor (600-700 feet wide). A narrow band of floodplain forest is associated with the tributary which transitions into mesic oak forest. Descriptions of all waterway and wetland crossings are contained within Table 1 and identified on the environmental features maps.

#### Ottawa – Fox River Primary Route

This portion of the route crosses 14 waterways and passes over four wetlands (non-waterway). Many of the waterways are intermittent unnamed tributaries (UNT) associated with agricultural swales or ditches (7) situated in open agricultural fields with little to no vegetated corridors. These waterways are generally either deeply excavated channels or gradually sloping grass swales. No natural communities appear to be present within this route due to the extensive agricultural disturbances, road corridors, and developed areas present within the proposed route.

The Fox River is the only named waterway crossing along this portion of the route. The proposed route crosses the Fox River immediately adjacent to CSX Railroad bridge and about 2 blocks north of the I&M Canal parkway. This crossing location contains an existing cleared corridor.

There are also several unnamed perennial and intermittent tributaries within this route that are not associated with agricultural fields (6). Generally, the corridors associated with these waterways are very limited, degraded, grazed shrub/scrub habitat. There are no extensive riparian habitats within this portion of the route.

A few degraded wetlands (excavated ponds, scrub-shrub, and wet meadow habitat) occur near the proposed ROW (4). Most of the wetlands appear to be associated with former mining ponds or drainages that have been altered by industrial development

#### North LaSalle-Fox River Alternate Route #1:

Environmental conditions along this proposed alternative are generally similar those described for the proposed primary route. No natural communities appear to be present within the route due to the extensive agricultural disturbances, road corridors, and developed areas present within the proposed route with the exception of two nature preserves potentially within close proximity. Two Illinois State-designated nature preserves occur near Wedron in the vicinity of Alternative #1: Lower Fox River –

Blake's Landing and Lower Fox River- Wedron Dells. Based on analysis of public data available from the Illinois Nature Preserves Commission, it appears that the Alternative does not cross the Lower Fox River - Blake's Landing Nature Preserve (located about 1 mile northwest of Wedron). The Lower Fox River-Wedron Dells Nature Preserve is privately owned; the location of the site is not publicly released by the Illinois Natural Heritage database except through project consultation with the Illinois Department of Natural Resources (currently in progress).

This portion of the Alternative 1 route crosses 28 waterways mostly associated with agricultural drainage swales and ditches (15). This route overlaps with several portions of the primary route and as a result crosses both the Little Vermillion River and Tomahawk Creek in the same location. The headwaters of the Pecumsaugan Creek is crossed in a different location than the primary, however it is similarly degraded and deeply excavated. The proposed crossing location of the Fox River transects an area of disturbed dry-mesic forest and successional field habitats before descending into the largely developed floodplain and crosses over an active silica mining area.

There are several unnamed perennial and intermittent streams that are not directly associated with agricultural fields (9). The corridors along these waterways are generally degraded, grazed and comprised of narrow bands of shrub/scrub habitat.

#### Ottawa-Fox River Alternative #1:

Environmental conditions along this proposed alternative are generally similar those described for the proposed primary route with the exception of adjacency to a national heritage corridor. This alternative follows along the northern edge of the Illinois and Michigan Canal National Heritage Corridor to the eastern side of Ottawa. No natural communities appear to be present within this route due to the extensive agricultural disturbances, road corridors, and developed areas present within the proposed route.

The route crosses 12 waterways many of which are associated with agricultural drainage swales and ditches (5). The route crosses two named waterways Goose Creek and the Fox River. Goose Creek is heavily impacted by urban development and limited amounts of upper perennial stream and mesic forest habitat are present along the narrow valley of this waterway. The Fox River crossing is located in the same area as proposed in the primary route.

There are several unnamed perennial and intermittent streams that are not directly associated with agricultural fields (5). The corridors along these waterways are generally degraded and/or grazed and comprised of narrow bands of shrub/scrub and/or floodplain forest habitat.

North LaSalle – Fox River Alternative #2:

Environmental conditions along this proposed alternative are generally similar those described for the proposed primary route with the exception of extensive mesic forest and floodplain habitat (2,500 feet) associated with both the Little Vermillion River and Tomahawk Creek crossings that also skirts the northern boundary of Illinois state-owned Mitchell's Grove Nature Preserve. Habitat types present in the nature preserve include dry-mesic upland forest, mesic upland forest, mesic floodplain forest, sandstone cliff, seep springs, and upper perennial streams. Three state listed endangered or rare species also occur within the preserve. Habitat types similar to those found in the nature preserve appear to be present within these waterway crossings of the proposed alternative corridor.

The route crosses 18 waterways many of which are associated with agricultural drainage swales and ditches (8). The route crosses six named waterways Little Vermillion River, Tomahawk Creek, Pecumsaugan Creek, Clark Run, Goose Creek, Buck Creek, and the Fox River. As described above, significant habitat is associated with the Little Vermillion River and Tomahawk Creek. The Pecumsaugan Creek crossing is less degraded in this area than other proposed crossings and contains scattered scrub/shrub to open habitat, but is quite limited near the shoulder of I80. Clark Run, Goose Creek, and Buck Creek are highly degraded and have been excavated for agricultural drainage. No habitat is associated with these waterways. The Fox River is crossed in the same proposed location as Alternative 1.

There are several unnamed perennial and intermittent streams that are not directly associated with agricultural fields (4). The corridors along these waterways are generally degraded and/or grazed and comprised of narrow bands of shrub/scrub and/or limited floodplain forest habitat.

Ottawa - Fox River Alternative #2:

This alternative follows an active railroad right of way along the route of what apparently was an old feeder canal to the I&M Canal. Much of this ROW is heavily wooded with large blocks of dry-mesic forest and follows the upper floodplain terrace of the Fox River. Floodplain forest and scrub shrub habitat appears to dominate lower lying areas of ground within the floodplain.

This route includes eight waterway crossings and one wetland crossing. Habitats of these highly disturbed urban waterways are similar to those described above for Alternative 1. Two named tributaries are crossed and include Goose Creek and the Fox River. The Goose Creek crossing includes a narrow band of mesic/floodplain forest habitat. The crossing at the Fox River contains approximately 200 feet of mesic/floodplain forest habitat on the western bank.

## SUMMARY

In general, all three proposed routes transverse primarily disturbed habitat comprised of agricultural lands, roadways, railroads, and residential and commercial development. Limited upland or wetland habitat is contained within all of the routes. Although, a formal review of threatened and endangered species, natural communities, state natural areas, and cultural and historic resources has not been completed by the appropriate agencies, based on the preliminary assessment conducted by NRC we can provide the following conclusions.

### Primary Route

The primary route generally contains the least amount of environmental constraints. There is not significant natural community or other significant habitat patches that occur along this route. The most substantial habitat areas that occur along the route include the northern most Fox River crossing, UNT-15, and UNT-17. Each of these crossings contain a mesic/floodplain forest corridor associated with the waterways. However, the forest habitat is somewhat limited at each selected crossing location. Specifically, the Fox River crossing location contains the narrowest band of forested fringe compared to areas north and south of this crossing. Based on the available public information, no state natural areas or cultural or historic resources are located within close proximity to the primary route.

### Alternative Route 1

The Alternative Route 1, in general is very similar to the primary route in regards to the highly disturbed and agricultural nature of the landscape. However, this route introduces additional environmental and cultural restraints. The Fox River is crossed in two locations, both near Wedron rather than crossing near Ottawa where the riparian corridor is more limited. As a result, the more extensive mesic/floodplain forests that occur in the Wedron area are traversed twice. Although one of the crossings is in the same location as the crossing in the primary route, the other crossing includes traversing through an additional 400-600 feet of mesic/floodplain forest habitat. Both the UNT-15 and UNT-17 are crossed in this alternative route in the same location as the primary route.

Two Illinois State-designated nature preserves occur near Wedron in the vicinity of Alternative 1. Although it appears the proposed route is approximately 1 mile from the Lower Fox River - Blake's Landing nature preserve the Lower Fox River- Wedron Dells preserve is privately owned and the exact location has not yet been released. In addition, this route follows along a portion of the Illinois and Michigan Canal National Heritage Corridor along the eastern edge of Ottawa. There may be severe restrictions for construction of transmission lines within this national heritage corridor.

### Alternative Route 2

The Alternative Route 2, in general is comprised of highly disturbed and agricultural lands through the majority of the route. However, this alternative introduces the potential for significant environmental constraints. The primary issue with this route is the extensive, undisturbed forested habitat associated with the Little Vermillion River and the Tomahawk Creek crossing. The Mitchell's Grove Nature Preserve is located near these stream crossings as well. Several rare species occur within the preserve and likely could occur within the proposed crossing since the habitat appears to be similar. In addition, this alternative follows the upper floodplain terrace parallel to the Fox River for a substantial distance. Although there is an existing railroad corridor, extensive mature forested habitat extends throughout this portion of the route which would likely require additional clearing for expansion of the corridor.

This alternative crosses the Fox River twice in the Wedron area, both of which contain mesic/floodplain forest habitat. UNT-17 is crossed with this alternative in the same location as the primary route.

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Ameren Services  
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Environmental Summary  
NRC Project #: 06-053

Please let me know if you have any questions or require any additional information. I have included the summary tables of waterway and wetland features for all routes.

Sincerely,  
*Natural Resources Consulting Inc.*



Jeff Kraemer  
Associate Principal Scientist

Enclosures  
Waterway/Wetland Tables